state, the respective syringes 3 and 4 are mainly supported by the protrusions 65 of the respective cylinder storage grooves 64b and 64c.

[0092] The syringe holder 60 in which the syringes 2, 3 and 4 are stored is placed in the sterilized package, and is subjected to sterilizing treatment together with the balloon catheter 40 and the like. At this time, since there are sufficient allowances between the syringes 2, 3 and 4 and the holding parts 61, 62 and 63, respectively, and the contact areas between the syringes 2, 3 and 4 and the holding parts 61, 62 and 63 are kept at the minimum areas owing to the protrusions 65, 66, gas can easily run through. Furthermore, since the flange storage grooves 36a, 36b and 36c and the plunger storage grooves 37a, 37b and 37c are formed into inclined surfaces or surfaces having the radius of curvature different from the syringes 2, 3 and 4 so as to form the clearances with respect to the syringes 2, 3 and 4, gas can easily run through. Therefore, the syringes 2, 3 and 4 are reliably sterilized by sterilizing gas.

[0093] In this embodiment, since the holding parts 61, 62 and 63 are formed so as to secure the sufficient allowances with respect to the syringes 2, 3 and 4, the clearances between the holding portions 61, 62, 63 and the syringes 2, 3, 4 are secured, whereby the syringes 2, 3 and 4 can be reliably sterilized. In particular, since the contact areas with respect to the syringes 2, 3 and 4 are reduced by means of the protrusions 65 and 66, sterilization of the syringes 2, 3 and 4 can be reliably performed.

[0094] Also, since the allowances are formed with respect to the syringes 2, 3 and 4, and the distal ends of the respective syringes 2, 3 and 4 are exposed, the syringes 2, 3 and 4 can easily be taken out.

[0095] Subsequently, referring to the drawings, a third embodiment of the invention will be described. The same components as the above-described embodiments are represented by the same reference numerals. Description overlapped with the above-described embodiments will be omitted.

[0096] This embodiment relates to a modification of the holding part.

[0097] As shown in FIG. 11, holding parts 71, 72 and 73 of a syringe holder 70 respectively have cylinder storage grooves 74a, 74b and 74c being substantially oval in cross-section.

[0098] The cylinder storage groove 74a is configured in such a manner that the portion near an upper opening 71b is protruded so as to be close to each other, so that protrusions 75a are formed, and the bottom side is formed into an oval shape. The number of contact portions between an inner wall of the cylinder storage groove 74a and the cylinder 6 are three positions at maximum including one on the bottom side and two on the side of the protrusions 75a. Each of them is subjected to linear contact. Other portions of the syringe 2 are not in contact with the holding part 71 and clearances are formed.

[0099] The cylinder storage groove 74b of the holding part 72 is larger than the cylinder storage groove 74a, is provided with protrusions 75b near an upper opening 72b, and is oval shape on the bottom side. The cylinder storage groove 74c of the holding part 73 is larger than the cylinder storage groove 74b, is provided with protrusions 75c near an upper opening 73b, and is oval shape on the bottom side.

[0100] They may be the cylinder storage grooves 81,82 and 83 as shown in FIG. 12.

[0101] The cylinder storage groove 81 is substantially formed into a cross-shape with reference to an upper opening 81b. The cylinder 6 is mainly stored in a center portion of the cylinder storage groove 81, and clearances are defined with respect to the cylinder 6 by extended portions 81a extending in four directions from the center portion. The respective corners which correspond to the proximal ends of the extended portions 81a come into linear contact with the cylinder 6 at four positions at the maximum.

[0102] The cylinder storage groove 82 substantially formed into a T-shape with reference to an upper opening 82b. The width of the upper opening 82b is smaller than the cylinder 22. The bottom side is increased in width, and this widened portion 82a defines clearances with respect to the cylinder 22. The cylinder storage groove 82 is configured to come into linear contact with the cylinder 22 at three portions at the maximum including the corners of the widened portion 82a and the bottom.

[0103] The cylinder storage groove 83 is substantially formed into a triangular shape. In this case, the bottom corresponds to the bottom side of the triangle, and an upper opening 83b corresponds to one apex. The width of the upper opening 83b is smaller than the outer diameter of the cylinder 26, and the width of the portion near the bottom side is larger than the cylinder 26. The cylinder storage groove 83 is configured to define the clearance with respect to the cylinder 26, and contact with the cylinder 26 at three portions at the maximum including the bottom and the inclined two side walls

[0104] This syringe holder may be composed of the three cylinder storage grooves of the same type selected from the cylinder storage grooves 81, 82 and 83.

[0105] With the cylinder storage grooves 74a, 74b, 74c, 81, 82 and 83, since the plurality of syringes 2, 3 and 4 can be held in line, usability is improved, and time for manipulation may be reduced. Since the clearances are defined between the syringes 2, 3 and 4 and the cylinder storage grooves 74a, 74b, 74c, 81, 82 and 83, gas can easily run through during gas sterilization, so that sufficient sterilization is achieved.

**[0106]** Referring to the drawings, a fourth embodiment of the invention will be described. The same components as the above-described embodiments are represented by the same reference numerals. Description overlapped with the above-described embodiments will be omitted.

[0107] FIG. 13 shows a state in which a syringe 92 is stored in a plurality of recessed holding parts 91 of a syringe holder 90.

**[0108]** The syringe 92 includes the cylinder 26, which is provided with an indication 93 on the outer peripheral surface at a position shifted from the direction of extension of the flange 12c by about  $90^{\circ}$  in the circumferential direction. In FIG. 13, the indication 93 includes a statement such as "For 15 mm balloon" or "15 mm". This indication means that this syringe 92 can expand the balloon 42 to a size corresponding to the expanded diameter of 15 mm at the maximum.

[0109] The holding part 91 of the syringe holder 90 differs from the holding part 61 in the second embodiment in the structure of a flange storage groove 94c. As shown in FIG. 14, the flange storage groove 94c includes a flat portion 95 as the bottom. The flat portion 95 is formed at a depth so that the flange 12c does not come into tight-contact with the flat portion 95 but the flat portion 95 prevents the rotation of the flange 12c when the syringe 92 is stored in the flange storage groove 94c. With this flat portion 95, movement in other